

CLAIMS

A complete listing of all of originally filed Claims 1 – 45 is provided below.

1. (Currently Amended) A method comprising:

receiving a request to send an email;

determining whether the email to be sent includes one or more attachments;

determining whether a recipient of the email has distributed storage separate from an incoming email server of the recipient for storing email attachments, if the email to be sent includes one or more attachments;

determining a network address of the recipient's distributed storage for storing email attachments, if the recipient has such distributed storage;

determining whether the recipient's distributed storage is available to receive the one or more attachments upon determining the network address; [[and]]

~~servicing said request to send said email based at least in part on the results of said determinations;~~

if the recipient has distributed storage for storing email attachments and the distributed storage is available to accept said one or more attachments;

sending a main body of the email to the incoming email server of the recipient;

sending an instruction to the recipient's distributed storage to submit a request for the one or more attachments of the email; and

upon receipt of such a request, sending the one or more attachments of the email to the recipient's distributed storage for email.

2. (Original) The method of claim 1, wherein said determining of whether the recipient of the email has distributed storage separate from an incoming email server of the recipient for storing email attachments comprises querying a recipient email distributed storage location server.

3. (Original) The method of claim 1, wherein said determining of the network address of the recipient's distributed storage for storing email attachments comprises querying a recipient email distributed storage location server.

4. (Original) The method of claim 1, wherein said determining of whether the recipient's distributed storage is available to receive the one or more attachments comprises pinging the recipient's email distributed storage using said determined network address.

5. – 8. (Canceled)

9. (Currently Amended) The method of claim 1, ~~wherein said determination results based servicing comprises sending a~~ further comprising sending the main body of the email and the one or more attachments of the email to the incoming email server of the recipient if the recipient has distributed storage but ~~[[and]]~~ the distributed storage is not available to accept said one or more attachments.

10. (Currently Amended) The method of claim 1, ~~wherein said determination results based servicing comprises sending a~~ further comprising sending the main body

of the email and the one or more attachments of the email to the incoming email server of the recipient if the recipient does not have distributed storage for email attachments.

11. – 12 (Canceled)

13. (Currently Amended) A method comprising:

receiving an email on behalf of a recipient, the email including a main body and one or more attachments;

determining whether the recipient of the email has distributed storage for storing email attachments;

determining a network address of the recipient's distributed storage for storing email attachments, if the recipient has such distributed storage;

determining periodically whether the recipient's distributed storage is available to receive the one or more attachments upon determining the network address; ~~and~~

~~sending the one or more attachments of the email to the recipient's distributed storage for email attachments for storage, upon determining that the recipient's distributed storage for email attachments is available to accept email attachments.~~

sending an instruction to the recipient's distributed storage to submit a request for the one or more attachments of the email; and

upon such a request, sending the one or more attachments of the email to the recipient's distributed storage for email attachments.

14. (Original) The method of claim 13, wherein said determining of whether the recipient of the email has distributed storage for storing email attachments comprises querying a recipient email distributed storage location server.

15. (Original) The method of claim 13, wherein said determining of the network address of the recipient's distributed storage for storing email attachments comprises querying a recipient email distributed storage location server.

16. (Original) The method of claim 13, wherein said determining of whether the recipient's distributed storage is available to receive the one or more attachments comprises pinging the recipient's email distributed storage using said determined network address.

17. – 18. (Canceled)

19. (Currently Amended) A method₁ comprising:

- receiving a registration to register an email user's distributed storage for email attachments, said user being a part of a peer-to-peer communication system;
- storing a network address of the email users user's distributed storage for email attachments;
- receiving a request from a requestor for the network address of the email user's distributed storage for email attachments; and
- providing the requestor with the network address of the email user's distributed storage for email attachments.

20. (Currently Amended) The method of claim 19, wherein the requestor is a selected one of a sender of an email and an incoming email server of a recipient of an email a sender of an email.

21. (Currently Amended) ~~A method comprising:~~
~~receiving a request from a selected one of a sender and an incoming email server~~
~~of a user to pull an attachment of an email;~~
~~in response, submitting a request to the selected one of the sender and the~~
~~incoming email server of the user to pull said email attachment;~~
~~receiving said email attachment; and~~
~~storing said email attachment.~~

The method of claim 19, wherein the requestor is an email server associated with an email recipient.

22. (Canceled)

23. (Currently Amended) A method comprising:
receiving a request from a user in a peer-to-peer communication system to
access an attachment of an email;
determining whether a distributed storage for storing email attachments for the
user is accessible and, if so, whether the attachment is stored in said distributed
storage; and

determining whether the attachment is stored in said distributed storage if said distributed storage is accessible; and

servicing said request to access said attachment of said email based at least in part on the result of said determination retrieving the attachment.

24. (Original) The method of claim 23, wherein said determining of whether the user's distributed storage for email attachments is accessible comprises pinging the user's distributed storage for email attachments.

25. (Currently Amended) The method of claim 23, wherein said retrieving the attachment further comprises ~~determination results based servicing comprises~~ retrieving the attachment from the user's distributed storage for storing email attachments if the user's distributed storage for storing email attachments is accessible, and the attachment is stored in the users distributed storage for storing email attachments.

26. (Currently Amended) The method of claim 23, wherein retrieving the attachment further comprises ~~said determination results based servicing comprises~~ retrieving the attachment from an incoming email server of the user if the user's distributed storage for storing email attachments is accessible, and the attachment is not stored in the users distributed storage for storing email attachments.

27. (Currently Amended) The method of claim 23, wherein retrieving the attachment further comprises ~~said determination results based servicing comprises~~

attempting to retrieve the attachment from an incoming email server of the user if the users distributed storage for storing email attachments is not accessible.

28. (Currently Amended) An apparatus comprising:

a storage medium having stored therein a plurality of executable programming instructions ~~designed to enable said apparatus to~~ that, when executed, perform the following steps:

receive ~~receiving~~ a request to send an email[[,]] to a recipient in a peer-to-peer communication system;

determine ~~determining~~ whether the email to be sent includes one or more attachments; ~~attachments;~~

determine ~~determining~~ whether a the recipient of the email has distributed storage separate from an incoming email server of the recipient for storing email attachments, if the email to be sent includes one or more attachments; ~~attachments;~~

~~determine~~ determining a network address of the recipient's distributed storage for storing email attachments, if the recipient has such distributed storage; ~~storage;~~

determine determining whether the recipient's distributed storage is available to receive the one or more attachments upon determining the network address; ~~address;~~ and

~~service~~ servicing said request to send said email based at least in part on the results of said determinations; and

a processor coupled to the storage medium to execute the programming instructions.

29. (Currently Amended) The apparatus of claim 28, wherein said programming instructions are further configured to ~~designed to enable the apparatus to~~ send the one or more attachments of the email to the recipient's distributed storage, if the recipient has distributed storage for storing email attachments, and the distributed storage is available to accept said one or more attachments.

30. (Currently Amended) The apparatus of claim 28, wherein said programming instructions are further configured to ~~designed to enable the apparatus to~~ send an instruction to the recipient's distributed storage to submit a request for the one or more attachments of the email, if the recipient has distributed storage for storing email attachments, and the distributed storage is available to accept said one or more attachments.

31. (Currently Amended) The apparatus of claim 30, wherein said programming instructions are further configured to ~~designed to enable the apparatus to~~ send the one or more attachments of the email to the recipient's distributed storage for email attachments upon receipt of a request from the recipient's distributed storage for the one or more attachments of the email.

32. (Currently Amended) The apparatus of claim 28, wherein said programming instructions are further configured to ~~designed to enable the apparatus to~~ retry to send the one or more attachments of the email to the recipient's distributed storage in accordance with a retry policy, if the recipient has distributed storage and the distributed storage is not immediately available to accept said one or more attachments.

33. (Currently Amended) The apparatus of claim 28, wherein said programming instructions are further configured to ~~designed to enable the apparatus to~~ send the one or more attachments of the email to the incoming email server of the recipient if the recipient has distributed storage and the distributed storage is not available to accept said one or more attachments.

34. (Currently Amended) The apparatus of claim 28, wherein said programming instructions are further configured to ~~designed to enable the apparatus to~~ send the one or more attachments of the email to the incoming email server of the recipient if the recipient does not have distributed storage for email attachments.

35. (Currently Amended) An apparatus comprising:
a storage medium having stored therein a plurality of executable programming instructions that, when executed, perform the following steps ~~designed to enable said apparatus to in a peer-to-peer communication system:~~

receive receiving an email on behalf of a recipient, the email including a main body and one or more attachments,

determine determining whether the recipient of the email has distributed storage for storing email attachments,

determine determining a network address of the recipient's distributed storage for storing email attachments, if the recipient has such distributed storage,

~~determine—periodically~~ periodically determining whether the recipient's distributed storage is available to receive the one or more attachments upon determining the network address, and

send sending the one or more attachments of the email to the recipient's distributed storage for email attachments for storage, upon determining that the recipient's distributed storage for email attachments is available to accept email attachments; and

a processor coupled to the storage medium to execute the programming instructions.

36. (Currently Amended) The apparatus of claim 35, wherein said programming instructions are further configured to ~~designed to enable the apparatus to~~ send an instruction to the recipient's distributed storage for email attachments, instructing the recipient's distributed storage for email attachments to submit a request for the one or more attachments of the email.

37. (Currently Amended) The apparatus of claim 36, wherein said programming instructions are further configured to ~~further designed~~ to enable the apparatus to send the one or more attachments of the email to the recipient's distributed storage for email attachments upon receipt of a request from the recipient's distributed storage for the one or more attachments of the email.

38. (Currently Amended) An apparatus comprising:

a storage medium having stored therein a plurality of executable programming instructions ~~that, when executed, perform the following steps designed to enable said apparatus to in a peer-to-peer communication system:~~

~~receive~~ receiving a registration to register an email user's distributed storage for email attachments,

~~store~~ storing a network address of the email user's distributed storage for email attachments,

~~receive~~ receiving a request from a requestor for the network address of the email user's distributed storage for email attachments, and

~~provide~~ providing the requestor with the network address of the email user's distributed storage for email attachments; and

a processor coupled to the storage medium to execute the programming instructions.

39. (Currently Amended) An apparatus comprising:

a storage medium having stored therein a plurality of executable programming instructions ~~that, when executed designed to enable said apparatus to in a peer-to-peer communication system:~~

~~receive~~ receiving a request from a selected one of a sender and an incoming email server of a user to pull an attachment of an email,

~~submit~~ submitting, in response, a request to the selected one of the sender and the incoming email server of the user to pull said email attachment,

~~receive~~ receiving said email attachment, and

store storing said email attachment; and

a processor coupled to the storage medium to execute the programming instructions.

40. (Currently Amended) The apparatus of claim 39, wherein the programming instructions are further configured to perform the following additional steps: further-enable the apparatus to

receive receiving a request from a requestor for the email attachment;

retrieve retrieving the email attachment from storage; and

provide providing the retrieved email attachment to the requestor upon successfully retrieving said email attachment from storage.

41. (Currently Amended) An apparatus comprising:

a storage medium having stored therein a plurality of executable programming instructions that, when executed, perform the following steps in a peer-to-peer communication system: designed to enable said apparatus to

receive receiving a request from a user to access an attachment of an email,

determine determining whether a distributed storage for storing email attachments for the user is accessible,

determine determining whether the attachment is stored in said distributed storage if said distributed storage is accessible, and

service servicing said request to access said attachment of said email based at least in part on the result of said determination; and

a processor coupled to the storage medium to execute the programming instructions.

42. (Currently Amended) The apparatus of claim 41, wherein the programming instructions are further configured ping the user's distributed storage for email attachments to determine ~~enable the apparatus to perform said determining of~~ whether the user's distributed storage for email attachments is accessible ~~by pinging the user's distributed storage for email attachments.~~

43. (Currently Amended) The apparatus of claim 41, wherein the programming instructions are further configured to enable the apparatus to perform said determination results based servicing by retrieving the attachment from the user's distributed storage for storing email attachments if the user's distributed storage for storing email attachments is accessible, and the attachment is stored in the user's distributed storage for storing email attachments.

44. (Currently Amended) The apparatus of claim 41, wherein the programming instructions are further configured to enable the apparatus to perform said determination results based servicing by retrieving the attachment from an incoming email server of the user if the user's distributed storage for storing email attachments is accessible, and the attachment is not stored in the user's distributed storage for storing email attachments.

45. (Currently Amended) The apparatus of claim 41, wherein the programming instructions are further configured to enable the apparatus to perform said determination results based servicing by attempting to retrieve the attachment from an incoming email server of the user if the user's distributed storage for storing email attachments is not accessible.